



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 1
5 Post Office Square, Suite 100
Boston, MA 02109-3912

May 23, 2012

Craig Ziady, Esq.
Cumming Properties
c/o: Jutkins Properties LLC
200 West Cumming Park
Woburn, MA 01801

Re: EPA's evaluation of two rounds of vapor intrusion data collected on your property at 21 Olympia Avenue (Building # 260206)

Dear Mr. Ziady:

EPA has reviewed two rounds of indoor air and subslab soil gas validated data collected from the building on your property at 21 Olympia Avenue, Woburn, MA, in March and June 2011, and two rounds of validated groundwater data collected near your property in August 2010 and April 2011. Our review indicates that **vapor intrusion does not pose a health threat inside the building**. The term "vapor intrusion" refers to the movement of volatile contaminants from groundwater into a structure.

The results of the sampling show that the compound tetrachloroethene (also known as perchloroethylene (PCE)) was detected in indoor air at very low levels that do not pose a health concern. Elevated levels of PCE were detected in subslab soil gas samples collected beneath your building. As noted above, the PCE concentrations beneath the building are not currently impacting indoor air and do not pose a health threat inside the building. However, if the building conditions were to change (e.g., future cracks were to form in the foundation/subslab of these buildings), there may be a greater potential for soil gas to more easily travel into your building. As a result, EPA requires, as a precaution, continued annual monitoring of volatile organic compounds (VOCs) in subslab soil gas and indoor air sampling inside your building (see attached Figure 2 for the purple highlighted area of building 260206 that will be targeted for sampling) to make sure that our findings regarding the quality of indoor air do not change in the future.

PCE was also found in groundwater samples collected near your property at levels above the federal drinking water maximum contaminant level (MCL) of 5 ug/L. As a result, EPA is requiring continued annual collection of groundwater samples in designated areas near your property so that EPA can continue to evaluate VOC conditions downgradient of/ near the UniFirst Source Area property. Note that the City of Woburn does not currently use this groundwater for drinking water purposes.

Please find attached two figures and one table. Figure 1 shows the locations where the two rounds of indoor air and sub-slab soil gas samples were collected within your building in March and June 2011. Figure 2 shows the purple highlighted area of your building (# 260206) for which EPA is requiring annual subslab and indoor air monitoring, as well as nearby annual groundwater monitoring. A table is also attached summarizing the two rounds of validated subslab, indoor air, and outdoor air data collected on your property.

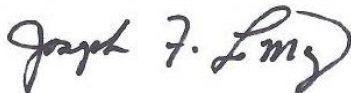
Since 1992, the UniFirst Corporation at the UniFirst Source Area property (15 Olympia Avenue) has been operating a groundwater treatment system that has reduced, and will continue to reduce, PCE concentrations in groundwater. In 2012, UniFirst will initiate a pilot In-Situ Volatilization (ISV) work plan with EPA oversight before designing and implementing a full-scale ISV system to treat VOC contaminated soils, as well as soil gas, (including PCE) on their property.

In addition, if your building stores any products containing volatile compounds such as cleaning products, personal care products, stored solvents/fuels, etc., EPA recommends that you store these products in a separately contained area from the occupied living spaces within the building.

In conclusion, EPA has determined that **vapor intrusion does not pose a health threat inside your building**. Based on elevated subslab soil gas concentrations, EPA will require, as a precaution, the continued annual collection of subslab soil gas and indoor air samples inside your building to monitor for any changed conditions. EPA will also require, based upon groundwater concentrations above the MCL, continued annual collection of groundwater samples near your property to evaluate VOC conditions downgradient of/ near the UniFirst Source Area property.

Thank you for your past and future cooperation and allowing access to your building for the collection of these samples. If you have any questions regarding this letter, or would like to meet and discuss the results, please contact me at (617) 918-1323.

Sincerely,

A handwritten signature in black ink, reading "Joseph F. LeMay". The signature is written in a cursive, flowing style with a large loop at the end of the last name.

Joseph F. LeMay, P.E.
Office of Site Remediation and Restoration



OA-1 IX	OUTDOOR AMBIENT AIR SAMPLING LOCATION
SS-1 •	SUB-SLAB AND INDOOR AIR SAMPLING LOCATION

A horizontal scale bar with alternating black and white segments. It is labeled with '0' at the left end, '15'' at the midpoint, and '30'' at the right end. Below the bar, the text 'SCALE IN FEET' is centered.

UNIFIRST PROPERTIES WOBURN, MASSACHUSETTS INDOOR AIR QUALITY AND VAPOR INTRUSION ASSESSMENT: REPORT OF RESULTS

**COMMERCIAL PROPERTY
SAMPLING LOCATIONS JUNE 2011**

FIGURE
1OA-2 



Figure 2. Annual Monitoring

- Monitoring Well Locations
- Building Footprints
- Parcel Lines

UC26 Monitoring Well Locations Identified for Groundwater Annual Monitoring

Building Locations Identified for Indoor Air and Sub Slab Soil Gas Annual Monitoring

Superfund Source Area Property

0 25 50 100
Feet

1 inch = 113 feet

Base map: Parcels; MASSGIS

Data Summary Table - Building 260206

Compound	Units	AA1	AA2	IA1	IA2	IA3	SS1	SS2	SS3	IA1	IA2	IA3	AA1	AA2	SS1*	SS2	SS3
		03/12/11	03/12/11	03/12/11	03/12/11	03/12/11	03/12/11	03/12/11	03/12/11	06/18/11	06/18/11	06/18/11	06/18/11	06/18/11	06/18/11	06/18/11	06/18/11
1,1,1-Trichloroethane	ug/m3	0.109 U	0.109 U	0.109 U [0.109 U]	0.109 U	0.109 U	10.8 [10.5]	50	15.9	0.109	0.109 [0.109 U]	0.109 U	0.109 U	0.109 U	8.4	38.2	12.1
1,1,2-Trichloroethane	ug/m3	0.109 U	0.109 U	0.109 U [0.109 U]	0.109 U	0.109 U	0.109 U [0.109 U]	0.218 U	0.109 U	0.109 U	0.109 [0.109 U]	0.109 U	0.109 U	0.109 U	0.218 U	1.09 U	0.218 U
1,1-Dichloroethane	ug/m3	0.081 U	0.081 U	0.081 U [0.081 U]	0.081 U	0.081 U	0.497 [0.481]	0.178	0.0810 U	0.081 U	0.081 U [0.081 U]	0.081 U	0.081 U	0.081 U	0.518	0.809 U	0.162 U
1,1-Dichloroethene	ug/m3	0.079 U	0.079 U	0.079 U [0.079 U]	0.079 U	0.079 U	0.0790 U [0.0790 U]	0.158 U	0.0790 U	0.079 U	0.079 U [0.079 U]	0.079 U	0.079 U	0.079 U	0.158 U	0.793 U	0.158 U
1,2,4-Trimethylbenzene	ug/m3	0.098 U	0.098 U	0.339 [0.295]	0.314	0.236	0.0980 U [0.0980 U]	0.196 U	0.138	2.13	2.3 [2.67]	2.69	0.241	0.142	0.197 U	0.983 U	0.197 U
1,2-Dibromoethane	ug/m3	0.154 U	0.154 U	0.154 U [0.154 U]	0.154 U	0.154 U	0.154 U [0.154 U]	0.307 U	0.154 U	0.154 U	0.154 U [0.154 U]	0.154 U	0.154 U	0.154 U	0.307 U	1.54 U	0.307 U
1,2-Dichloroethane	ug/m3	0.081 U	0.081 U	0.125 [0.125]	0.125	0.162	0.0810 U [0.0810 U]	0.162 U	0.0810 U	0.308	0.081 U [0.081 U]	0.368	0.081 U	0.081 U	0.162 U	0.809 U	0.162 U
1,2-Dichloropropane	ug/m3	0.092 U	0.092 U	0.092 U [0.092 U]	0.092 U	0.092 U	0.0920 U [0.0920 U]	0.185 U	0.0920 U	0.092 U	0.092 U [0.092 U]	0.092 U	0.092 U	0.092 U	0.185 U	0.924 U	0.185 U
1,3-Butadiene	ug/m3	0.044 U	0.044 U	0.058 [0.06]	0.058	0.073	0.0440 U [0.0440 U]	0.0880 U	0.0440 U	0.077 J	0.1J [0.1 J]	0.077 J	0.044 UJ	0.044 UJ	0.089 UJ	0.442 UJ	0.089 UJ
1,3-Dichlorobenzene	ug/m3	0.12 U	0.12 U	0.12 U [0.12 U]	0.12 U	0.12 U	0.120 U [0.120 U]	0.240 U	0.120 U	0.12 U	0.12 U [0.12 U]	0.12 U	0.12 U	0.12 U	0.24 U	1.2 U	0.24 U
1,4-Dichlorobenzene	ug/m3	0.12 U	0.12 U	0.12 U [0.12 U]	0.12 U	0.12 U	0.120 U [0.120 U]	0.240 U	0.120 U	0.18	0.168 [0.186]	0.168	0.12 U	0.12 U	0.24 U	1.2 U	0.24 U
Benzene	ug/m3	0.424	0.373	0.721 [0.661]	0.753	0.747	0.223 U [0.223 U]	0.447 U	0.223 U	3.18	3.19 [3.14]	3.07	0.224 U	0.224 U	0.447 U	2.24 U	0.447 U
Bromodichloromethane	ug/m3	0.134 U	0.134 U	0.134 U [0.134 U]	0.134 U	0.074J	3.61 [3.46]	0.589	0.623	0.315	0.328 [0.315]	0.315	0.134 U	0.134 U	2.57	1.34 U	0.482
Bromoform	ug/m3	0.206 U	0.206 U	0.206 U [0.206 U]	0.206 U	0.206 U	0.206 U [0.206 U]	0.413 U	0.206 U	0.207 U	0.207 U [0.207 U]	0.207 U	0.207 U	0.207 U	0.414 U	2.07 U	0.414 U
Carbon Tetrachloride	ug/m3	0.578	0.553	1.36 [1.29]	1.22	1.54	0.126 U [0.126 U]	0.251 U	0.283	0.704	0.679 [0.66]	0.679	0.447	0.459	0.252 U	1.26 U	0.302
Chlorobenzene	ug/m3	0.092 U	0.092 U	0.092 U [0.092 U]	0.092 U	0.092 U	0.0920 U [0.0920 U]	0.184 U	0.0920 U	0.092 U	0.092 U [0.092 U]	0.092 U	0.092 U	0.092 U	0.184 U	0.921 U	0.184 U
Chloroform	ug/m3	0.098 U	0.098 U	3.22 [3.2]	3.36	4.07	57.9 [55.3]	29.5	31.3	5.27	5.13[4.79]	5.57	0.098 U	0.098 U	58.6	28.9	32.7
cis-1,2-Dichloroethene	ug/m3	0.079 U	0.079 U	0.079 U [0.079 U]	0.079 U	0.079 U	0.242 [0.258]	0.158 U	0.0790 U	0.079 U	0.079 U [0.079 U]	0.079 U	0.079 U	0.079 U	0.285	0.793 U	0.158 U
Ethylbenzene	ug/m3	0.087 U	0.087 U	0.521 [0.464]	0.538	0.486	0.0870 U [0.0870 U]	0.174 U	0.269	3.47 J	3.56 J [3.68J]	3.57 J	0.091 J	0.087 UJ	0.174 UJ	0.869 UJ	0.174 UJ
Isopropylbenzene	ug/m3	2.46 U	2.46 U	2.46 U [2.46 U]	2.46 U	2.46 U	2.46 U [2.46 U]	4.91 U	2.46 U	2.46 U	2.46 U [2.46 U]	2.46 U	2.46 U	2.46 U	4.92 U	24.6 U	4.92 U
Methyl tert-butyl ether	ug/m3	0.072 U	0.072 U	0.072 U [0.072 U]	0.072 U	0.072 U	0.0720 U [0.0720 U]	0.144 U	0.0720 U	0.072 UJ	0.072 UJ [0.072 UJ]	0.072 UJ	0.072 UJ	0.072 UJ	0.144 UJ	0.721 UJ	0.144 UJ
Methylene Chloride	ug/m3	2.1	1.99	1.74 U [1.74 U]	1.74 U	2.01	1.74 U [1.74 U]	3.47 U	1.74 U	6.81	3.26 [3]	2.89	3.29	3.96	3.47 U	17.4 U	3.47 U
Naphthalene	ug/m3	0.262 UJ	0.262 UJ	0.262 UJ [0.262 UJ]	0.262 UJ	0.262 UJ	0.262 UJ [0.262 UJ]	0.524 UJ	0.262 UJ	0.603 J	0.587 J [0.514 J]	0.603 J	2.86 J	0.157 J	0.524 UJ	2.62 UJ	0.524 UJ
Tetrachloroethene	ug/m3	0.136 U	0.136 U	1.02 [0.942]	1.19	1.17	1,340 [1,270]	3,080	1,380	1.09	1.13 [1.23]	1.19	0.136 U	0.136 U	1100	5730	1120
Toluene	ug/m3	0.407 U	0.339 U	3.82 [3.43]	5.64	4.03	0.188 U [0.188 U]	0.376 U	0.192 U	27.9 J	29J [27.2 J]	27 J	0.637 J	0.724 J	0.377 UJ	1.88 UJ	0.377 UJ
trans-1,2-Dichloroethene	ug/m3	0.079 U	0.079 U	0.079 U [0.079 U]	0.079 U	0.079 U	0.273 [0.261]	0.158 U	0.0790 U	0.079 U	0.079 U [0.079 U]	0.079 U	0.079 U	0.079 U	0.285	0.793 U	0.158 U
trans-1,3-Dichloropropene	ug/m3	0.091 U	0.091 U	0.091 U [0.091 U]	0.091 U	0.091 U	0.0910 U [0.0910 U]	0.181 U	0.0910 U	0.091 U	0.091 U [0.091 U]	0.091 U	0.091 U	0.091 U	0.182 U	0.908 U	0.182 U
Trichloroethene	ug/m3	0.107 U	0.107 U	0.107 U [0.107 U]	0.107 U	0.107 U	27.6 [26.0]	4.28	0.644	0.107 U	0.107 U [0.107 U]	0.107 U	0.107 U	0.107 U	25.7	4.46	0.709
Vinyl Chloride	ug/m3	0.051 U	0.051 U	0.051 U [0.051 U]	0.051 U	0.051 U	0.0510 U [0.0510 U]	0.102 U	0.0510 U	0.051 U	0.051 U [0.051 U]	0.051 U	0.051 U	0.051 U	0.102 U	0.511 U	0.102 U
Xylenes (total)	ug/m3	0.26 U	0.26 U	2.68 [2.37]	2.67	2.46	0.260 U [0.260 U]	0.521 U	11.6	18.8	19 [19.9]	19.3	0.33	0.304	0.521 U	2.61 U	0.521 U

Notes:
IA = Indoor Air sample
AA = Ambient Air (Outdoor Air) sample
SS = Subslab Soil gas sample
[0.109U] - Duplicate sample results presented in brackets
U - Compound not detected
J - Estimated value
µg/m3 - micrograms per cubic meter
(*) - Field duplicate collected at this location; sample volume extrmely low at end of collection period; result not used.